

REMARKS

In response to the Office action mailed on May 3, 2010 ("Office Action"), Applicants have amended claim 1 and added new claim 17. Support for the new claim can be found in paragraph [0089] of the specification. No new matter has been introduced by the above amendment. Claims 1-7 and 17 are presented for examination. Claims 8-16 remain withdrawn.

Initially, Applicants note that the Office action summary erroneously states that only claims 8-12 are withdrawn from consideration. Applicants request correction of this error in the next communication.

Further, in the response filed on January 28, 2010, Applicants requested that the obviousness-type double patenting rejections of the pending claims over (1) claims 1-9 of co-pending Application No. 10/559,544 and (2) claims 1-6, 16 and 17 of co-pending Application No. 10/599,167 be held in abeyance. Since the Office Action does not raise these two rejections, Applicants assume that these rejections have been withdrawn.

The Office rejected claims 1-7 under 35 U.S.C. §102(b) as anticipated by Saruhashi et al., JP 2000-254222 ("Saruhashi").

Independent claim 1 is discussed first. Claim 1 covers bundles containing a plurality of selectively permeable polysulfone-based hollow fiber membranes, each of which has an inner surface for contacting blood and an outer surface for contacting a dialyzing fluid. The content of a hydrophilic polymer (*e.g.*, polyvinyl pyrrolidone) in the outer surface of a hollow fiber membrane is 25 to 50 mass %.

Saruhashi describes a hollow fiber for blood purification having a hydrophilic polymer (*e.g.*, polyvinyl pyrrolidone) and a hydrophobic polymer (*e.g.*, polysulfone). *See, e.g.*, paragraphs [0010-0012]. It also discloses that the ratio of the hydrophilic polymer to the hydrophobic polymer in the outer surface is 5-25%. *See, e.g.*, paragraph [0010]. It would have been apparent to one skilled in the art that this ratio is determined by the following equation: (weight of hydrophilic polymer) / (weight of hydrophobic polymer). Thus, at the highest ratio 25%, the hollow fiber disclosed in Saruhashi contains 25 parts by weight of the hydrophilic polymer and 100 parts by weight of the hydrophobic polymer (*i.e.*, $25 / 100 = 25\%$) in the outer surface. However, at this ratio, the content of the hydrophilic polymer in the outer surface in the

hollow fiber disclosed in Saruhashi is only 20% (i.e., $25 / (25 + 100) = 20\%$),¹ which is significantly less than the content of the hydrophilic polymer (i.e., 25 to 50 mass%) in the outer surface recited in claim 1. In other words, even when the hollow fiber disclosed in Saruhashi contains the highest amount of a hydrophilic polymer in its outer surface, the content of the hydrophilic polymer in its outer surface is still significantly less than that recited in claim 1.

Thus, claim 1 clearly is not anticipated by Saruhashi. Since claims 2-7 depend from claim 1, they also are not anticipated by Saruhashi.

Accordingly, Applicants request reconsideration and withdrawal of this rejection.

CONCLUSION

Applicants submit that the obviousness rejections asserted by the final Office action have been overcome.

Any circumstance in which Applicants have: (a) addressed certain comments of the Examiner does not mean that Applicants concede other comments of the Examiner; and (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for the patentability of those claims and other claims.

Please apply any charges to deposit account 06-1050, referencing Attorney's Docket No. 19461-0004US1.

Respectfully submitted,

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¹ According to the present specification,

“[t]he content of PVP in the [outer] surface of the hollow fiber membrane is calculated from the found value (N) of nitrogen and the found value (S) of sulfur by the following equation (in which the molecular weight of poly(vinylpyrrolidone) is 111; ... and that of polyfulsone, 442): ...
<Equation for Membrane of PSf with PVP> PVP content (Hpvp) [mass %] = $100 \times (N \times 111) / (N \times 111 + S \times 442)$.” See paragraph [0089].

In other words, the specification teaches that the content of a hydrophilic polymer in the outer surface of a hollow fiber membrane recited in claim 1 is determined by the following equation: (weight of hydrophilic polymer) / [(weight of hydrophilic polymer) + (weight of hydrophobic polymer)].